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ABSTRACT

This discussion guide on the conference theme, Library and Information Services for Improving Organizations and the Professions, focuses on the information needs of organizational and professional constituencies, including business. It is intended to serve as a guide for the discussion of issues raised in this theme area. Following a general introduction, background information is presented in each of the five discussion-topic sections, which in turn are subheaded with a variety of sample discussion alternatives. Types of organizations whose information needs are considered include product and service producers, e.g., businesses, utilities, farms, hospitals, and research organizations; mutual benefit associations, e.g., professional societies, labor unions, civic and philanthropic groups, advocacy groups, foundations (mostly nonprofit); and the professions, e.g., law, medicine, science, engineering, social work. While the information needs of special constituencies are treated in depth in Issue No. 3, the remaining sections address concerns of general interest to all three user groups. A 9-item bibliography and an abstract in Spanish are included. (Author/SW)

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Library and Information Services For Improving Organizations and the Professions

A Discussion Guide

by

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Prepared for the White House Conference on Library and Information Services

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PREFACE

This discussion guide is intended as an informative and provocative summary of some of the many issues present in this theme. The guide was not planned to be exhaustive but to raise questions and stimulate discussion.

The guide has been prepared by an individual whose knowledge of the subject area is respected by colleagues and members of the community. In writing the guide, the author drew on the issues and resolutions raised in pre-Conference activities, documented in the many pre-Conference publications issued by the White House Conference staff. The author also drew on her own experience and background. The views and opinions expressed in the guide do not necessarily reflect the official position or policy of either the White House Conference staff or the National Commission on Libraries and Information Science (NCLIS).

The purpose of the guide is not to dictate the issues to be discussed but rather to provide some general background and to crystallize some of the major questions delegates may wish to address at the Conference. Final responsibility for deciding what issues are to be discussed and what resolutions are to be passed rests with you, the delegate.

Marilyn K. Gell
Director
White House Conference
on Library and Information
Services
October 1979

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ABSTRACT

Organizations and professions range across businesses, utilities, farms, professional societies, labor unions, civic and philanthropic organizations and professionals in areas such as law, medicine or science. Organizations and professions, in many ways, form the economic backbone of our country, and their information needs in filling this role are daily growing greater and more sophisticated. Individuals in these categories need information for management, planning, research and development and for effective and timely communication with clients and constituent groups. Increasingly, participants in organizations and professions need information to update their skills in a subject area or for fulfilling their work responsibilities. In meeting the needs of these special groups which, together, form such a large part of our society, many issues could be addressed:

- What new roles and services should libraries and other information providers assume in serving organizations and professions? Some possibilities are new technologically-based information retrieval systems, continuing education programs in work-related areas, and collection of community data.

- What methods of delivering information services should be used to meet the needs of organizations and professions? Networking and cooperation, new methods of delivering documents, and increased use of telecommunications channels might be considered.

- How can libraries and information providers best serve the needs of special groups such as professionals in specialized subject areas and not-for-profit organizations? Should not-for-profit organizations that often claim missions in support of the public good receive special subsidies?

- What should be the roles of the Federal government and the private sector in providing or funding information services that serve organizations and professions? Might the public and private sectors cooperate to their advantage in provision of some services such as production of data bases or publication of scientific research?

- To what extent should various types of information relevant to individuals or organizations be made available while protecting proprietary or sensitive information?

SERVICIOS THE BIBLIOTECAS E INFORMACION PARA EL ADELANTO DE ORGANIZACIONES Y LAS PROFESIONES

En la actualidad, las diferentes organizaciones y ramos profesionales abarcan una larga gana en la economia nacional. Organizaciones en el campo del comercio; en los servicios de sanidad, agua potable y electricidad; en la industria agropecuaria, los greemios laborales y cooperativas de trabajadores; organizaciones civiles y filantropicas de asistencia publica y sociedades profesionales; las disciplinas tradicionales en el campo de jurisprudencia y derecho, en las ciencias fisicas y matematicas y sus aplicaciones, y en las ciencias biologicas y la medicina, todas ellas constitutyen los cimientos de las estructura economica del pais. Miembros de estas entidades dependen del flujo continuo de informacion para poder formar un criterio correcto y planear decisiones concernientes sus areas de especialidad y staisfacer sus responsabilidades profesionales. Si deseamos suplir estas necesidades de informacion seria sensato empezas por contestar a varias preguntas que surgen de immediate:

- Que nuevos servicious o areas de especializacion debemos crear en las bibliotecas y otros medios de informacion para proveer informacion del momento? Unas de las alternativas serian nuevos metodos de obtencion de informacion, programas de educacion complementaria para trabajadores y un sistema de coleccion de informacion comum para varias areas de especializacion.

- Que metodos de distribucion de informacion son adecuados en la vida moderna? Quizas la respuesta haria mencion de un sistema de cooperacion mutua y el mayor use de las vias de telecomunicacion.

- Como se prodria servir a law necesidades de informacion de grupos especiales, como por ejemplo profesionales en areas tecnicas y organizacions de beneficiencia publica? Deberian otogarse prebendas especiales a estos grupos?

- Cual es laa responsabilidad del gobierno y cual la del sector provido para financiar los servicios de informacion necesarios? Deberia contribuir la cidadania para la coleccion de informacion confidencial, y la industria en la publicacion de experimentaciones tecnicas y cientificas?

- Hasta que punto informacion personal e informacion conceniente a organizaciones puede ser distribuida sin violar el debecho a la confidencialidad?

LIBRARY AND INFORMATION SERVICES FOR IMPROVING ORGANIZATIONS AND THE PROFESSIONS

BACKGROUND

As society becomes more complex, economic and social well-being is increasingly dependent upon effective policy and decisionmaking. This cannot be accomplished without essential information from a variety of perspectives: technical, legal, social, political, and economic. The compilation of this essential information and its timely delivery to decisionmakers and policymakers are almost as complex as the society it seeks to serve. In dealing with these complexities we affect the allocation, regulation, and marshalling of our information needs, and make our contribution to the way society advances in the future.

According to the 31st edition of the American Library Directory, there are about 8,455 public library systems in the United States. Funding for these systems breaks down roughly as follows: 88 percent local, 7 percent State, and 5 percent Federal. Public libraries have traditionally followed a policy of open access to information for all citizens. Many of the larger and some of the smaller of these libraries have developed special sections and/or collections to serve the needs of local business and professional persons.

Special libraries, numbering about 5,287, are found in research laboratories, businesses, and educational institutions. Unlike their public counterparts, these libraries are generally supported by sponsoring organizations. Traditionally, special libraries have played an important role in providing information to business and organizational users.

Academic and Federal libraries also must be considered part of the information distribution chain with respect to meeting the needs of organizations and professions. Their special collections are often quite important to such outside users.

Partially as a result of emerging technologies that allow greater flexibility in the handling of information, many information-related businesses have been created. These firms are engaged in a variety of production activities including database creation, literature searching, information analysis, market research, information dissemination, publishing, and information brokerage. The brokerage firms range in size from independent freelancers to established companies providing many of the same services as special libraries on a for-profit basis. With the emergence of these information providers, new definitions of the roles and responsibilities of these various groups will have to be sought.

The political, economic, and emotional reactions to the flow of information are as diverse as the populace itself. Librarians, economists, businessmen, and the taxpayer all are concerned about how information should be disseminated. A range of issues debating funding, governance, use of new technologies, resource-sharing, and continuing education must be addressed if we are to provide the most effective mechanisms for meeting the information needs of organizations and professions.

This discussion guide focuses on the information needs of organizational and professional constituencies, including business. It is intended to serve as a guide for discussion of the issues raised in this theme area. Following a general introduction, background information is presented in each of the five discussion-topic sections, which in turn are subheaded with a variety of sample discussion alternatives.

Throughout the five discussion-topic sections we will be concerned with the information needs of the following types of organizations:

- o product and service producers, e.g., businesses, utilities, farms, hospitals, and research organizations;
- o mutual benefit associations, e.g., professional societies, labor unions, civic and philanthropic groups, advocacy groups, foundations (mostly nonprofit); and
- o professions, e.g., law, medicine, science, engineering, social work, etc.

While the information needs of special constituencies will be treated in depth in Issue 3, the remaining sections address concerns of general interests to all three user constituencies.

Issue #1: What new roles and services should libraries and other information providers assume in serving organizations and professions?

New technologies for information handling and dissemination are proliferating in today's research laboratories. These mechanisms enable both the explosion of our information resources and their exploration in research and decisionmaking. Increasingly, it is important for the estimated 14 million businesses in the United States to have ready access to information of all kinds — for management and planning, and research and development, and for communication with clients and customers. In the financial and information industries, information resources are the central core around which they are organized. Public and academic libraries, private sector information providers, and special libraries all provide access to needed information. Still, there are many questions being raised and debated.

SHOULD LIBRARIES DEVELOP POLICIES PERTAINING TO USER CHARGING THAT WOULD PROVIDE FOR MEETING THE NEEDS OF ALL CONSTITUENCIES INCLUDING ORGANIZATIONS AND PROFESSIONS?

One of the major debates involving the information needs of organizations and professions concerns the availability of business information units in publicly-supported libraries. The fee-for-service question is at issue here. In California, a recent study of computerized literature retrieval in the public library found that the highest usage came from business organizations and students. Businesses were generally willing to pay for the searching costs. Concurrently, many large public and academic libraries have begun developing fee-based services for businesses in order to provide relevant resources. The fee-for-service issue is a particularly emotional one among librarians, with many believing that public or academic libraries should not charge for services, while an equally large number would encourage libraries to move in a more market-oriented direction.

Organizations and professionals are increasingly using computerized information systems to retrieve bibliographic information. However, with the rising costs of information production and dissemination, it is becoming more and more difficult for public libraries to provide these as a free commodity. Traditional library budgets do not suffice to cover the costs of such services. Also, many public and academic libraries are restricted from offering the new and innovative services because they do not fit into the

structure of traditional library charters. Some libraries, however, like the Minneapolis Public Library, have developed fee-for-service units which enable them to provide the resources needed by special constituencies.

Academic libraries often contain specialized collections that are highly useful to organizational and professional users. As a result, many special academic library units, like Harvard University's Baker Library at the School of Business Administration, have initiated fee-for-service programs in order to meet outside demand. Questions concerning profitability vs. nonprofitability of these units concern both academic and public libraries. On the other hand, special libraries are not constrained by the open-access, information-as-a-public-good tradition. The value of information services provided by the special library is often related to the value of the products of the sponsoring institution. In business organizations, in particular, special libraries are increasingly operating as cost recovery and/or profit centers, selling their services to other groups within their organizations.

SHOULD STATE AND LOCAL GOVERNMENTS DEVELOP MECHANISMS BY WHICH LIBRARIES CAN SHARE IN THE COLLECTION, PREPARATION OR DISSEMINATION OF COMMUNITY DATA RESOURCES?

Another area of concern involves the role of the public library in the collection of community data to support the need of businesses and other organizations. For example, many companies need information regarding buying habits. Arguments center around the kinds of information the library might provide, as well as the nature of the role of the library, vis-a-vis private information suppliers, in packaging and disseminating community information. Collection of such data can range from unsophisticated, haphazard approaches to more systematic information collection and generation programs. Questions of funding sources, manpower/equipment availability, and duplication of data are factors that must be considered in attempting to determine the role of the library here.

State and local governments can coordinate data collection activities. They can also help define the role of the library through legislative and administrative actions, by providing additional funds, by making available use of expensive capital equipment held by other State and local agencies, and by providing access to data collections held by other

agencies. On the other hand, private information suppliers might be better able to package, format, and produce needed community data. Libraries, government, and the private sector need to explore ways in which they can work together to make community data readily available to those who need it.

SHOULD PUBLIC LIBRARIES COORDINATE AND PROMOTE CONTINUING EDUCATION ACTIVITIES FOR SMALL BUSINESS?

The question of library and information-provider support for continuing education should also be examined in any discussion of new roles and services on behalf of organizational and professional users. Businessmen and professionals have specific and well-defined educational needs. "Keeping up" in today's world requires learning about new techniques, concepts, and procedures of both a technical and behavioral nature.

Private sector information suppliers have entered the continuing education marketplace. Many of them have developed specific courses aimed at a variety of audiences. For example, courses distributed on audio cassette tapes have been developed on subjects such as time management and communications skills. Videotape producers have developed full-scale curricula in technical areas such as semiconductor technology and structural programming. Information providers with proven subject expertise have developed conferences and seminars which are marketed to appropriate audiences.

SHOULD STATE AND LOCAL GOVERNMENTS DEVELOP ALTERNATIVE METHODS OF FUNDING TO ENHANCE CONTINUING EDUCATION?

Public and academic libraries have also perceived a role for themselves in continuing education. Special collection development in areas of local concern are one way the library encourages continuing education. Addition of audiovisual educational material for the professional adult has been considered a positive step for the library to take. Here again the problem of funding for purchase of these materials is an issue. Many library patrons might argue that private organizations, through their special libraries, should bear the costs of providing expensive educational technology products to interested employees. But perhaps the library should help support the unemployed engineer who needs to learn about new technology in order to find a job. In addition, perhaps the library should also help support local, small businesses that cannot afford

large continuing education programs. Once the role of the library in continuing education is defined, library staff and users need to explore ways in which the library can take advantage of a variety of State and local resources, both from the government and the private sector, in order to furnish the needed continuing education programs.

Issue #2: What kinds of information delivery services should be used to meet the needs of organizations and professions?

SHOULD RESOURCE SHARING AND DEVELOPMENT OF PROFESSIONALLY-ORIENTED INFORMATION NETWORKS BE ENCOURAGED BY POLICYMAKERS AT ALL LEVELS OF GOVERNMENT?

One possible solution to helping reduce economic pressures on small business libraries is the encouragement of network building for resource sharing purposes. On-line catalogs and bibliographic databases can be used to enhance the distribution of scientific and technical information through promulgation of interlibrary-loan and network-sharing activities. Major bibliographic networks already exist in the private sector. OCLC, Inc. and the Research Libraries Group (RLG) support cataloging operations for user libraries in all three sectors--public, private, and academic. These networks, in effect, form the basis for a national pool of information resources. Private sector information services, including special libraries, could be encouraged to participate in special networks, forming specialized information pools. These could be subject-oriented or regionally grouped. Through the use of incentives, financial or otherwise, the Government can help make available to the public special collections that otherwise might be inaccessible. With the proliferation of information resources, and the high cost of obtaining and disseminating these resources, the need for resource sharing and network development becomes more prevalent.

SHOULD THE FEDERAL GOVERNMENT AND STATE GOVERNMENTS FUND RESEARCH AND DEVELOPMENT FOR THE APPLICATION OF TECHNOLOGY TO INFORMATION HANDLING?

The development of technologies for new methods of document delivery are of considerable concern to the organizational or professional user. The Government and the private sector have both been innovative in developing new delivery services. These new technologies are important to libraries in that they provide for faster acquisition and less expensive storage of materials. An ongoing experiment using facsimile document distribution technology is being funded through the National Science Foundation. This experiment enables participants to receive the full texts of articles contained in the Searchable Physics Information Notices (SPIN) database via facsimile transmissions from the American Institute of Physics. The database is produced by the American

Institute of Physics and distributed by a commercial database vendor. At certain prearranged user locations, facsimile terminals are available which can facilitate the transfer of copies of articles in the database on request.

Facsimile transmission involves the use of the telephone lines for document transfer. The increased use of this technology could be very beneficial in an era when time efficiency has become a high priority.

Other document delivery and handling systems have been developed in the private sector. The use of microforms has received major attention for the development of newspaper and journal archives and for the handling of large updatable reference collections. For example, one private sector supplier has offered a unique microfiche subscription service to standards and specifications. This service enables the buyer to receive automatic updates in areas of his chosen concentration. Many manufacturing and other organizations find systems such as these cost effective, time efficient, and easy to use. Here again, there are funding issues concerning the development of document delivery systems and questions concerning the ways in which all libraries -- special, academic, and public -- can afford to take advantage of these new technologies.

SHOULD THE FEDERAL GOVERNMENT DEVISE POLICIES TO PROMOTE THE USE OF NEW TECHNOLOGIES IN COMMUNICATIONS SERVICES TO SUPPORT THE TRANSFER OF INFORMATION AMONG ORGANIZATIONS AND THEIR CONSTITUENCIES?

Many organizations are using new technologies to enhance communications, both internally and externally. Government policies concerning the use of telecommunications technology for inter- and intra-organizational communications must provide the framework for the distribution of information within the society. The range of alternative channels for information distribution includes postal services, computer-based electronic message systems, broadcast and cable systems, satellite systems, etc.

Businesses rely on communications media and technology to disseminate information about their products and services and to obtain consumer feedback. For example, computers and communication systems are used to order products, send messages, make travel arrangements, verify location of needed journals, simulate market demands, etc. New information services like the Green Thumb Agricultural Experiment, sponsored by the University of Kentucky and

the U.S. Department of Agriculture, provide specialized information — in this case, information about weather, crop yields, etc. -- to special user groups.

SHOULD THE U.S. POSTAL SERVICE BE ALLOWED TO DEVELOP NEW ELECTRONIC MEANS OF MAIL DELIVERY?

The future of telecommunications regulation and the relationship of that regulation to new forms of information processing is of considerable importance to organizational constituencies. The Government needs to develop policy that will resolve conflicts such as the threat posed by electronic message carriers to the operation of the U.S. Postal Service. Organizations want to be able to avail themselves of the most economical, effective communications channels. For example, the new technology of electronic message systems opens the question of Postal Service "monopoly." Should the status quo be retained based on the argument that special needs will not be met by the private sector? Those who argue against the "monopoly" and in favor of competition from the telecommunication industry point to the inability of the Postal Service to provide economically efficient mail delivery despite tax exemption and virtual monopoly status. Should the Postal Service be allowed to develop electronic distribution services? What policies can Government devise to help promote economically effective communications channels to support the flow of information needed by product and service producers? Continued research and evaluation regarding the use of new technological systems is essential to the operations of organizations, both large and small. The use of new communications and delivery technologies can be enhanced through cooperation among Government, libraries and private industry. Development of programs to train library workers in the use of new technologies would be helpful. Cooperative efforts to develop funding for new projects and to provide for assessment of existing projects could also be undertaken.

Issue #3: How can libraries and information providers best serve the needs of special constituencies such as professional groups and nonprofit organizations?

Professional groups are heavy users of library and information services. For example, the almost 3 million scientists and engineers in this country are estimated to each average over 100 hours of annual reading in scholarly publications. According to a recent study, publishers distribute over 2.5 billion copies of journal articles annually, and the expenditures for the production and dissemination of published materials is well over $10 billion annually. Professional personnel tend to promote substantial social benefits through their pursuit of excellence. Accomplishments resulting from professional efforts are in part related to the sophistication which professionals demonstrate in their access and use of information.

SHOULD THE FEDERAL GOVERNMENT CONTINUE TO FUND THE INFORMATION PROGRAMS OF THE NATIONAL LIBRARY OF MEDICINE AND OTHER PROFESSIONALLY-ORIENTED AGENCIES TO PROVIDE NATIONWIDE ACCESS TO INFORMATION HOLDINGS?

Computerized literature retrieval is often used by the professional or by an information intermediary in pursuit of specific information. Among the first bibliographic databases to be available via the computer were databases in the fields of medicine (MEDLARS), education (ERIC), and chemistry (Chemical Abstracts). Over 300 specialized databases are available today. These databases include bibliographic as well as numeric information and cover an increasing number of problem-oriented multidisciplinary subjects. Initial database development was funded in large part by the Federal Government through programs administered by the National Library of Medicine, the Department of Health, Education, and Welfare, and the National Science Foundation. Today, Government is still heavily involved in supporting information needs of professionals. In addition to support for database generation, the Government provides depository document collections in major public and academic libraries to ensure that materials cited in databases such as ERIC are available for use by the professional in need of the information. These document collections are considered to be socially useful and, therefore, necessary to promote the public good.

SHOULD LOCAL PUBLIC LIBRARIES DEFINE AND IDENTIFY SPECIFIC INFORMATION NEEDS OF PROFESSIONAL PERSONNEL AND DEVELOP PROGRAMS TO MEET THOSE NEEDS? AND SHOULD BUDGETS OF PUBLIC ACADEMIC LIBRARIES BE AUGMENTED TO ALLOW THESE INSTITUTIONS TO SERVE MORE FULLY PROFESSIONAL NEEDS?

The Federal Government, as the sponsor of libraries such as the National Library of Medicine and the National Agricultural Library, has assumed the role of provider and coordinator of resources for professional information needs at the national level. Local public and academic libraries need to be concerned with the dissemination of professional information as well. For example, public and academic libraries might be better able to service needs of local professionals if their roles were more fully defined and budgets were increased to support these roles. Topics to be considered include funding for professional information systems, coordination of planning efforts, development of local collections and resource-sharing, and the local or academic library's role in developing or sponsoring continuing education programs, conferences, and workshops.

SHOULD THE FEDERAL GOVERNMENT CONTINUE TO SUPPORT POSTAL AND/OR COMMUNICATIONS SUBSIDIES TO NONPROFIT ORGANIZATIONS? SHOULD THESE SUBSIDIES EXTEND TO INDEPENDENT LIBRARIES SUPPORTED BY FOUNDATIONS?

Many of the organizations which contribute to our national well-being do not produce goods, but rather offer services designed for special constituencies. Generally these types of organizations serve a group of persons or organizations by providing them with some mutual benefit. Examples of the type of organizations included in this section include labor unions, professional societies, civic groups, philanthropic bodies, advocacy groups, and foundations. Most operate on a nonprofit basis. Many mutual benefit organizations provide information to their special constituencies in the form of publications such as journals, bulletins, newsletters, etc. Questions discussed in all of the other issue areas in support of this theme are relevant to the concerns of nonprofit constituencies. However, there is some feeling that nonprofit organizations should be treated differently by public libraries, Federal information services, and Government policymakers.

There has been concern expressed that since nonprofit organizations operate in the public interest, special consideration such as Postal Service discounts, lower advertising rates, and tax exemptions should be encouraged. On the other hand, for foundation libraries there are arguments that, in effect, these benefits form a case for price discrimination. U.S. Internal Revenue Service policy with regard to these issues is at question here. Should the Government give preferential

treatment to nonprofit and other mutual benefit organizations on the basis that these organizations provide a public service, even though these organizations may operate just like any other business?

SHOULD THE FEDERAL GOVERNMENT CONTINUE TO SUPPORT THE INFORMATION RESEARCH AND DEVELOPMENT ACTIVITIES OF PROFESSIONAL AND OTHER MUTUAL BENEFIT ASSOCIATIONS?

In the case of the American Chemical Society, information services have long been front-runners in the use of new distribution technology and new product innovations. Since 1956, their Chemical Abstracts Service has operated on a self-supporting basis. However, the National Science Foundation has provided a unique source of funds for research and development efforts at Chemical Abstracts on the basis that the organization is nonprofit and provides a public service. There are private sector information suppliers who would argue that the Government is favoring one type of information producer over another; that subsidy for R&D activities is a form of discrimination against the private sector; and that, in fact, Chemical Abstracts looks like any other business. However, many publishing and information-dissemination innovations have resulted from Government support of organizations like Chemical Abstracts. Should Government continue to support the R&D activities of nonprofit organizations with special funding and grants? Does the funding actually constitute a form of favoritism or, in fact, does it promote the public good?

Special constituencies such as nonprofit and professional groups can be served through the encouragement of dissemination through subsidies (as discussed more fully in Issue 4), and through resource-sharing (as discussed more fully in Issue 2). In addition, Federal, State, and local libraries can be instrumental in providing needed new services (as discussed more fully in Issue 1) that will promote increased diffusion of knowledge generated by the information activities of professional groups and nonprofit organizations.

Issue #4: What should be the roles of the Federal Government and the private sector in providing information services and systems that serve organizations and professions?

SHOULD THE FEDERAL GOVERNMENT CONTINUE TO FUND DEVELOPMENT OF INFORMATION SYSTEMS THAT SERVE BUSINESSES AND PROFESSIONAL USERS?

The Federal Government has traditionally supported the development of highly sophisticated and specialized information services. With more and more money being spent on research and development, expenditures for scientific and technical information (STI) in this country increased over 300 percent in the period 1960-1974. In 1975, Government expenditure for STI totalled approximately 40 percent of the $10.3 billion spent on producing, disseminating, and using STI. (General Accounting Office 1979) The growth of the private sector information industry raises some difficult issues with respect to the rules and responsibility of the Government as an information provider. The problems become even more complex when we realize that most Government agencies have legal or implied information dissemination mandates. Decisions concerning the provision and distribution of Government information services are based on a variety of factors.

For example, Congress has mandated that the government should operate on a full cost recovery basis as much as possible when providing services to the private sector. The U.S. Office of Management and Budget (OMB) has detailed policies for Federal agencies to follow in implementing user charges and thus reinforced the Government's general policy on cost recovery. In some cases, OMB relies on the private sector for the provision of goods and services wherever possible and for the acquisition and evaluation of major systems (hardware, buildings, etc.) by Government agencies. Congress has also provided for the right of first refusal on the part of the public printer for publication of any information created through the use of appropriated funds.

The National Technical Information Service (NTIS) has the responsibility for making available to industry and the general public the reports of research funded by the U.S. Government. To this extent, it collects, indexes, and abstracts about 90,000 titles a year. Announcements of availability are provided through various publications, and special subscription services for selected categories of information and documents are offered. The information

programs of the Federal Government also include those of the major national libraries (Library of Congress, National Library of Medicine, and the National Agricultural Library) as well as the information services that have been built to support the missions of various Federal agencies (such as the National Air and Space Administration — NASA — and the Department of Transportation).

SHOULD THE FEDERAL GOVERNMENT ENCOURAGE PRIVATE SECTOR PARTICIPATION IN INFORMATION PRODUCTION AND DISSEMINATION ACTIVITIES THROUGH DEVELOPMENT OF PROGRAMS WHICH SUPPORT PRIVATE SECTOR PARTICIPATION IN GOVERNMENT INFORMATION ACTIVITIES?

Examples of the Government's work with the private sector to stimulate research and development in information systems include its software development contracts with Lockheed Corporation for the NASA RECON information retrieval system and with System Development Corporation for the MEDLINE information retrieval system. This software is now commercially available via their DIALOG and ORBIT retrieval networks respectively. (Lancaster 1979) These systems demonstrate one way in which the Government has subsidized information system development and dissemination. Arguments for Government subsidy center around the topic of social benefit. If the information is to be of maximum use in a given area (e.g., medicine), it must be easily accessible, both physically and financially, to those who need to use it. While there is no doubt that information needs must be met, an open market situation might provide more choices for users regarding format, distribution channels, etc.

Private sector information providers argue against restrictions on private publication on the grounds that their publishing know-how enhances distribution and dissemination of knowledge. (Oettinger 1975) In addition, many private sector companies have been innovative in the information marketplace; they have perceived the need to package and market information for specific user groups. In the area of newsletter publishing, a wide market is flourishing, and the entrepreneurial spirit is evident. Postal subsidies for the mailing of books and journals are one way that the Government can help private information suppliers. However, in the newsletter business, timeliness is of the essence and many publishers feel the need to utilize first class mail service, which carries no subsidy.

SHOULD THE FEDERAL GOVERNMENT SUBSIDIZE ACTUAL INFORMATION USERS THROUGH THE PROVISION OF SOME FORM OF INFORMATION VOUCHER TO USERS, RATHER THAN FUND SYSTEM DEVELOPMENT?

While information has often been assumed to be a free commodity, in fact it is not free. One argument for continued Government involvement in providing information services centers around the high costs of technological innovation needed to mechanize information dissemination. Funds for preliminary studies and development projects are generally more available in the public sector. One possible solution to the social benefit dilemma might be a shifting of the subsidy from the producer and the distributor to the user himself for purchase of information from a private sector supplier.

SHOULD BETTER GUIDELINES AND POLICIES BE DEVELOPED FOR COORDINATING INFORMATION SYSTEM DEVELOPMENT IN THE PUBLIC AND PRIVATE SECTORS IN ORDER TO MINIMIZE OVERLAP AND MAXIMIZE DISTRIBUTION?

The role of the Federal Government in funding information services for organizations and professions is especially difficult to determine. The Government must decide when and what to subsidize in the private sector. It must also address such issues as how to regulate Postal Service subsidies, how to provide information services to the public while encouraging the growth of the commercial information industry, how to work with information providers in both sectors to minimize duplication and overlap, and how to develop national networks which will enable the interchange of information and data among all sectors while protecting privacy rights at the same time.

Issue #5: To what extent should information be made available to individual and organizational users?

Freedom of information is the principle by which we espouse disclosure and openness in our handling of the Nation's information pool. Traditionally, information has been closely held in this society. From the secret deliberations which marked the drafting of the Constitution to the passage of sunshine laws guaranteeing open access to public hearings, there has been considerable debate about just how free and how open access to information should be. The diversity of circumstances surrounding the nature of information suggest that there is not only one solution.

SHOULD BUSINESSES AND OTHER ORGANIZATIONS REVEAL PERSONAL INFORMATION FROM CREDIT REQUESTS, HOSPITAL RECORDS, CONSUMER SURVEYS, EMPLOYEE RECORDS, ETC.?

Disclosure issues of concern to organizations and professions include such topics as trade secrets, financial information, personal information, consumer protection information, and protection of research results. Not surprisingly, the laws passed in Congress concerning the disclosure of publicly held information are affecting the disclosure of such privately produced information. In recent years, the legislative process has moved us in the direction of greater Government disclosure. The 1966 Freedom of Information Act, together with its 1974 Amendments, and the Privacy Act of 1974 form the basis of current Government policy with respect to information. These acts define types of information to be disseminated; however, they do not entirely clarify the degree of protection or promotion to be afforded certain kinds of information. For example, while the Freedom of Information Act contains exemptions delineating types of information which need not be disclosed, special constituencies often take issue with these exemptions.

SHOULD THE FEDERAL GOVERNMENT PROTECT THE COMPETITIVE NATURE OF AMERICAN BUSINESS BY REGULATING THE USE OF THE FREEDOM OF INFORMATION ACT BY CORPORATIONS OR THEIR LEGAL REPRESENTATIVES?

A specific instance might be cited. Some Federal agencies collect trade secret and commercial information. Under current laws, this information is protected from disclosure if the holding agency is able to demonstrate that the data is (a) commercial, (b) obtained from a private individual, or (c) proprietary or confidential. The purpose of the exemption is to ensure the privacy and competitive position

of the issuing agent. Businesses, for the most part, want to be assured that financial and other information submitted to a Federal agency to assist Government decision-making will be closely guarded.

SHOULD BUSINESSES AND PRIVATE INFORMATION PROVIDERS CONTINUE TO USE TRADE AND COPYRIGHT MECHANISMS TO PROTECT INTELLECTUAL PROPERTY?

As the technology for information dissemination has expanded, the potential for protection of the copyright holder has diminished. The new Copyright Act of 1975 has attempted to modernize the law to accomodate new forms of dissemination. Its fair use doctrine, which permits limited copying of copyrighted materials in specific circumstances, is subject to controversy. For example, a patron in a company library may himself make a copy of an article for his own personal use, but the librarian may not make multiple copies of an article to forward to researchers or managers in need of the information contained therein. Other copyright issues focus on the protection of computer software and information contained in computer databases.

SHOULD THE FAIR USE CLAUSE IN THE COPYRIGHT ACT OF 1975 BE BETTER DEFINED OR AMENDED WITH RESPECT TO ORGANIZATIONAL DUPLICATION OF COPYRIGHTED INFORMATION?

One solution to the periodical copyright question has been establishment of the Copyright Clearance Center to lessen administrative burdens on monitoring and control, and to facilitate payments from copyright users to copyright owners. The major controversy concerns compensation for the information provided or produced. Publishers and information producers see copyright restrictions as a form of investment protection, while users see such restrictions as obstacles to free access to information. Mechanisms must be found that will stimulate development of information products and still provide reasonable access to information.

Restrictions on the use and transfer of information in the private sector are of considerable concern to businesses and organizations. Numerous bills have been submitted in State legislatures and Congress to regulate the private sector. The intent of this regulation is to protect the privacy rights of individuals. Most of this information is sensitive -- including medical records, credit information, employment records, etc. Many unresolved issues include whether or not the Federal Government should impose restrictions or limitations on private sector collections of personal information, and what, in fact, should be the limitations.

REFERENCES

1. American Library Directory, 31st edition. New York: R.R. Bowker, 1978.

2. General Accounting Office. Better Information Management Policies Needed: A Study of Scientific and Technical Information Services. Washington, DC: General Accounting Office, 1979.

3. Guiliano, Vincent, et. al. Into the Information Age. Chicago: American Library Association, 1978.

4. Lancaster, R. Wilfred. Information Retrieval Systems: Characteristics, Testing, and Evaluation, 2nd edition. New York: John Wiley & Sons, 1979.

5. Oettinger, Anthony G. Elements of Information Resources Policy: Library and Other Information Services. Cambridge: Harvard University Press, 1975.

BIBLIOGRAPHY

1. Ackoff. Russell L., et. al. Designing a National Scientific and Technological Communication System. Philadelphia: University of Pennsylvania Press, 1976.

2. Bowker Annual of Library and Book Trade Information, 22nd edition. New York: R.R. Bowker, 1977.

3. Domestic Council, Committee on the Right of Privacy. National Information Policy: A Report to the President of the United States. Washington, DC: NCLIS, 1976.

4. Jackson, Eugene B. and Ruth L. Jackson, editors. Industrial Information Systems: A Manual for Higher Managements and Their Information Officer/Librarian Associate. Stroudsburg, PA: Dowden, Hutchinson, and Ross, 1978.

5. Knight, Douglas M. and E. Shepley Nourse. Libraries at Large: Tradition, Innovation, and the National Interest. New York: R.R. Bowker, 1969.

6. U.S. Congress. House. Improved Administration of Public Printing Services and Distribution of Public Documents. Amendment to the U.S. Code, title 44. 96th Congress, 1st session, H.R. 4572.

7. U.S. Congress. Committee on House Administration. Information Policy: Public Laws from the 95th Congress. Washington, DC: GPO, 1979.

8. U.S. Congress, Joint Committee on Printing, Ad Hoc Advisory Committee on Revision of Title 44. Federal Government Printing and Publishing: Policy Issues. 96th Congress, 1st session. Washington, DC: GPO, 1979.

9. White House Conference on Library and Information Services, 1979. Issues and Resolutions: A Summary of Pre-Conference Activities. Washington, DC: NCLIS, October 1979.